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June, 1930

INSECTS AFFECTING MAN AND ANIMALS

F. C. Bishopp, in Charge

F. C. Bishopp and W. E. Dove spent the latter half of June in a general survey of the Southeastern coastal region, in search of a site for field headquarters for investigations of the sand fly. Varicus points were visited between Wilmington, N. C., and Miami, Fla., and Charleston, S. C., was finally selected.

F. J. Krueger has been appointed Field Assistant, to help carry on investigations of the sand fly, with temporary headquarters at Savannah, Ga.

H. S. Peters left Washington early in June to join a scientific expedition to the Florida Keys and the West Indies, headed by Dr. Paul Bartsch, of the National Museum. Mr. Peters will pay special attention to the distribution and the breeding conditions of the sand fly, and to the collection of ticks, Mallophaga, and other ectoparasites of birds and animals. The expedition is expected to be completed early in the fall of the present year.

W. V. King left his regular duties at Mound, La., on June 11 for a trip to Portland, Oreg., and stopped en route at Bozeman, Mont., to consult entomologists there concerning mosquitoes and ticks. He reached Portland about June 18, and spent the remainder of the month in a general survey of an acute problem of infestation by mosquitoes in the vicinity of that city.

D. C. Parman spent the most of June in a general survey of western Texas and Oklahoma, studying the distribution of the ectoparasites of poultry.

On June 12 R. W. Wells, of the field laboratory at Galesburg, Ill., visited the Rock River Farms at Byron, Ill., to investigate some electrified screens which have been installed there for the control of flies. He reports that the matter is worthy of further consideration.

Dr. D. F. Miller has been appointed temporary Field Agent, effective June 11, and assigned to the field laboratory at Beltsville, Md., to carry on studies in the rearing of blowflies.

Richard Wagner has been appointed temporary Field Agent, effective June 20, to investigate poultry lice, and assigned to the field laboratory at Beltsville, Md.

## TRUCK-CROP INSECTS

J. E. Graf, in Charge

C. C. Plummer, Field Assistant, left Columbus, Ohio, June 14, for Mexico City, Mexico, where he arrived June 17. He will assist B. J. Landis in the collection, shipping, and study of parasites of the Mexican bean beetle.

W. A. Thomas, Chadbourn, N. C., visited the berry-growing sections of the Gulf States during the second week in June to determine the importance of the strawberry weevil (Anthonomus signatus) in these centers of early production of strawberries. Incidentally, he visited the field laboratories at Biloxi and Gulfport, Miss.

M. M. High, in charge of the field laboratory at Gulfport, Miss., reports that R. W. Harned, D. W. Grimes, M. L. Grimes, T. F. McGehee, and G. F. Arnold, of the Mississippi State Plant Board, visited that laboratory on June 14.

P. K. Harrison, formerly employed at Picayune, Miss., but who was granted leave without pay, received his Master's Degree from the University of Maryland, June 10, and has been reinstated, effective June 18, as Assistant Entomologist at the new field laboratory at Fairfax, S. C.

J. C. Chamberlin, R. A. Fulton, and C. F. Henderson, of Twin Falls, Idaho, S. E. Crumb, C. W. Getzendaner, and W. W. Baker, Puyallup, Wash., M. C. Lane, Walla Walla, Wash., F. H. Shirck, Toppenish, Wash., and J. C. Elmore, Santa Ana, Calif., employees of this division, were authorized to attend the meeting of the American Association of Economic Entomologists at Eugene, Oreg., June 19 and 20.

R. E. Campbell, who has been on leave without pay, in order to take graduate work at the University of Minnesota, returned to his official duties at Alhambra, Calif., on June 21.

In the fourth week of June N. F. Howard and Alvah Peterson, of Columbus, Ohio, made a scouting trip to Birmingham, Ala., and other points in the Southeast, to get first-hand information on the degree of infestation by the Mexican bean beetle, with a view to the initiation of large-scale tests in control.

J. N. Tenhet, who has been engaged in the study of wireworms affecting tobacco at Chadbourn, N. C., was transferred on June 27 to Fairfax, S. C., where he will take charge of the new field laboratory established there to investigate the sandy-land wireworm.

C. F. Stahl, who has been at Chadbourn, N. C., studying insects affecting strawberries, was transferred to Sanford, Fla., June 30, to succeed W. E. Stone, who has been transferred to Mexico City. Mr. Stahl will be in charge of investigations of celery insects.

A new instrument has been devised by T. E. Bronson, of the field laboratory at Madison, Wis., which records on one chart the force of the downfall of rain and the wind velocity. It will be of great value in studying the effect of storms upon infestations by the pea aphid.

The summer field laboratory at Columbus, Wis., has been discontinued. The headquarters for investigations of the pea aphid will remain at Madison, Wis.

Field Assistants who have been recently appointed are J. F. Roe, J. H. Lilly, and E. J. Lease, for service at Madison, Wis., G. Bayer, at Alhambra, Calif., G. Zelsnick and J. B. Cooper, at Philadelphia, Pa., W. C. Newman and J. G. Wilson, at Sanford, Fla., J. R. Weedon, at Norfolk, Va., W. A. Lyon and S. C. Lyon, at Clarksville, Tenn., F. B. Cotner, at Bozeman, Mont., D. M. DeLong, C. W. Eagleson, J. A. Gillett, H. A. Waters, A. C. Cole, Jr., and C. T. McCoy, at Twin Falls, Idaho, E. C. Murdock, at Grand Junction, Colo., H. E. Dorst, at Richfield, Utah., A. E. Bonn and P. M. Eide, at Puyallup, Wash., P. C. Ting, at Santa Ana, Calif., R. W. Brubaker, A. Peterson, and C. C. Plummer, at Columbus, Ohio, J. G. Shaw, at Estancia, N. M., and R. H. Davidson, at Geneva, N. Y.

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## BEE CULTURE

Jas. I. Hambleton, in Charge

Prof. George H. Vansell, of Davis, Calif., spent three days in June with Dr. A. P. Sturtevant at the Intermountain Bee Culture Field Laboratory, Laramie, Wyo., studying methods of diagnosing diseases of bees.

J. E. Eckert, Associate Apiculturist at the field laboratory at Laramie, Wyo., will continue this summer his work on the flight range of the honeybee. The experimental work will be conducted in the San Luis Valley.

Jas. I. Hambleton visited the Northwestern Experiment Farm (co-operative investigations) of the Bureau of Plant Industry, at Holgate, Ohio, on June 10 to 12, to confer with Dr. E. A. Hollowell, of that Bureau, concerning the details of experiments to be conducted there this summer on the relation of honeybees to the pollination of red clover. Prof. W. E. Dunham, of Ohio State University, and Frank Bailey, a student at the University, have been appointed Field Assistants, and will be responsible for the apicultural features of the experiments. This work is to be conducted cooperatively with the Bureau of Plant Industry.

Dr. C. S. Hudson, of the National Institute of Health, visited the Bee Culture Laboratory on June 23. Doctor Hudson is interested in obtaining a supply of melezitose, a rare sugar which honeybees occasionally gather when they have access to scrub pines.



## FOREST INSECTS

F. C. Craighead, in Charge

Dr. Craighead spent June 9 to 13 at Asheville, N. C., in consultation with R. A. St. George regarding plans for work during the summer at the field laboratory there. On June 23 he left Washington for a trip of inspection of the western field laboratories of this division.

L. G. Baumhofer reported at Halsey, Nebr., on June 20, to resume his work on the tip moth affecting pine plantations there.

Letters recently received by Dr. T. E. Snyder from city building inspectors of Long Beach and Monrovia, two cities in California, bring news that those cities have recently included in the mandatory sections of their building codes the provisions recommended by the Bureau of Entomology for the prevention of damage by termites.

### Contributions from the Gipsy-Moth Laboratory

Visitors to the Gipsy-Moth Laboratory in June included H. L. Bailey, Entomologist, Department of Agriculture, Montpelier, Vt., H. B. Weiss, Chief, Bureau of Statistics and Inspection, and E. G. Rex, Japanese Beetle Control, Trenton, N. J., June 20, C. F. Doucette, Bureau of Entomology, Sumner, Wash., June 21, and Fred C. Brosius, Plant Quarantine and Control Administration, San Francisco, Calif.

College students given temporary appointments as Field Assistants at the Gipsy-Moth Laboratory in June are J. H. Lybass, H. D. Freeman, and R. K. Voorhees, of the University of Florida, T. O. Fitzgerald, of the University of Tennessee, R. H. Fox, of the University of New Hampshire, and G. W. Oliver and C. W. Manty, of the Massachusetts Agricultural College.

R. R. Whitten, who graduated from the Massachusetts Agricultural College in 1929, was appointed Junior Entomologist on June 23.

Dr. J. R. Hobbs, of Harvard University Medical School, and Dr. W. H. Sawyer, jr., of Bates College, have been given temporary appointments as Field Assistants for the summer, in connection with studies being conducted by the Gipsy-Moth Laboratory. Dr. Hobbs is studying certain bacterial diseases, and Dr. Sawyer certain fungous diseases.

In June shipments of Calosoma sycophanta beetles were sent from the Gipsy-Moth Laboratory to the State of Washington. Part of these have been liberated by J. C. Evenden in areas where the fir tussock moth, Hemerocampa pseudosugata McD., is present, and the remainder have been liberated under direction of C. F. Doucette in areas infested by the satin moth, Stilpnotia salicis L. Shipments of puparia of the tachinid fly Compsilura concinnata Meig. have also been sent to Mr. Doucette and to A. B. Baird, of the Dominion Parasite Laboratory, Belleville, Ontario.

The flies issuing from these puparia will be liberated in infestations of the satin moth in the State of Washington and in British Columbia.

Large shipments of gipsy-moth parasites from the European laboratory at Budapest, Hungary, began arriving at the Gipsy-Moth Laboratory during the latter part of June.

J. V. Schaffner, jr., of the Gipsy-Moth Laboratory, spent June 1 to 6 with R. Nash, assistant to H. B. Peirson, State Entomologist of Maine, investigating injury to spruce in Maine by a webworm, Epinotia nanana Tr. An attempt was made to obtain information regarding the area affected and the seriousness of the injury.

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## DECIDUOUS-FRUIT INSECTS

A. L. Quaintance, in Charge

The peach-insect field laboratory at Fort Valley, Ga., has been moved from Troutman Avenue to Church Street, in that city. The new location is central, and affords more floor space and ground than before for carrying on the work of the laboratory. In the building is a well-equipped chemical laboratory, a laboratory for spray machinery and insecticides, a room for insect breeding, a photographic room, a shop, an exhibit room, a library, and offices. There is an acre of ground around the laboratory, providing space for field experiments, and containing a large insectary, a barn, and other buildings. Dr. B. A. Porter and G. F. Mozzette visited the laboratory on June 26.

### Contributions from the Japanese-Beetle Laboratory

On June 6 W. E. Steenburgh, of Belleville, Ontario, Canada, visited the laboratory to obtain parasites of the oriental fruit moth.

Prof. Herbert Osborn, Research Professor of Entomology, Ohio State University, visited the laboratory June 13. He was much interested in meeting the various workers there and observing the laboratory equipment.

Edward A. Chapin, of the taxonomic unit, at Washington, D. C., visited the laboratory on June 20.

On June 23 Prof. C. C. Hamilton, of the New Jersey State Agricultural Experiment Station, visited the laboratory to confer with members of the staff.

On June 23 Dr. Philip Garman, of the Connecticut Agricultural Experiment Station, visited the laboratory to obtain parasites of the oriental fruit moth.

## TROPICAL, SUBTROPICAL AND ORNAMENTAL PLANT INSECTS

A. C. Baker, in Charge

By invitation, E. A. McGregor addressed the Association of County Agricultural Commissioners at the annual meeting, held May 23 at Redding, Calif. The subject of the address was "Citrus pest control, with special reference to sulphur dusting." In connection with this trip into northern California, observations were made in citrus groves in the Oroville district.

Dr. Baker left Washington on June 10 for Mexico City, to visit the laboratory there and to confer with the members of the staff regarding the work under way on the Mexican fruit worm.

W. E. Stone was transferred to this division, effective June 16, joined Dr. Baker in Texas, and accompanied him to Mexico. He will have charge of the administrative work of the project of the Mexican fruit worm in Mexico.

On June 19 and 20 E. A. McGregor, of the field laboratory at Lindsay, Calif., and Randall Latta, of Sumner, Wash., attended the annual meeting of the Pacific Slope Branch of the American Association of Economic Entomologists.

F. J. Spruijt, in charge of the division's bulb-insect laboratory at Babylon, N. Y., spent June 3 and 4 in Washington for consultation with Bureau officials.

James M. McGough has been appointed Junior Entomologist, to assist Paul A. Berry in Cuba in work on the parasites of the citrus black fly.

In June A. J. Haas was appointed temporary Field Assistant, to assist in experiments relating to the studies on oil spray being conducted at the field laboratory at New Orleans.

Dr. S. A. Watson, of Whittier College, L. C. Fife, of the Utah State Agricultural College, R. P. Buckner, of Whittier College, and J. W. Mehl, of the California Institute of Technology, have been appointed temporary Field Assistants at the field laboratory at Whittier, Calif., where they will assist in the study of the resistance to hydrocyanic-acid gas of certain scale insects affecting citrus.

C. H. Huff, of Ohio State University, has been given temporary appointment as Field Assistant, to help with the experimental work that is being done on bulb insects at Babylon, N. Y.

T. R. Hansberry, P. M. Scheffer, and Dudley Young have been temporarily appointed Field Assistants at Sumner, Wash., to help in field experiments and studies on fumigation that are being conducted in the Northwest on bulb flies.



## COTTON INSECTS

B. R. Coad, in Charge

J. W. Ingram, Assistant Entomologist at the New Orleans field laboratory, visited the Delta Laboratory on June 24 and 25 to obtain information on the technique of studying certain minute insects that injure the roots of sugarcane.

On June 2 C. H. Gaddis, Entomologist of the Georgia State Board of Agriculture, was a visitor to the field laboratory at Tallulah.

In June Mr. Coad spent some days at College Station, Tex., completing arrangements for the cooperative project undertaken with the entomologists of the Texas Agricultural Experiment Station. This project is primarily concerned with control of the cotton bollworm, but also deals with the problem of control measures for simultaneous infestations of cotton by several pests, such as have been occurring in central Texas in recent years. E. W. Dunnam, who spent last winter on leave, completing work for his doctorate, has been returned to the service and permanently assigned to College Station for work on this project. R. W. Moreland, of the field laboratory at Tallulah, has also been assigned to College Station for the present season.

Near the end of June, Messrs. McGinley and Payne visited Kansas City and Wichita to inspect airplanes offered for purchase by the Department of Agriculture.

Mr. Coad recently visited the State and Federal Experiment Stations at Poplarville and McNeill, Miss., on business relating to cotton insects there.

H. C. Young, of the field laboratory at Tucson, Ariz., has returned to Oklahoma, to take charge of field work in experiments on control of the boll weevil. These experiments have been carried on for the last two years in cooperation with the Oklahoma Experiment Station and Extension Service.

G. L. Smith has returned to the field laboratory at Tallulah from Presidio, Tex., where he was scouting for the pink bollworm during the last winter.

The following temporary Field Assistants were appointed and reported for duty in the month of June: At Florence, S. C., M. R. Buffkin, E. V. Welch, M. C. Brunson, jr., R. J. Groover, and E. E. Rogers; at Tallulah, La., James Watkins, R. P. Patty, G. W. Davis, H. D. Tate, L. H. Stubblefield, C. F. Rainwater, F. D. Smith, R. W. Bunn, H. B. Mills, K. H. Smith, P. H. Berry, H. R. Johnson, H. S. Young, and T. F. Henderson.

## TAXONOMY

Harold Morrison, in Charge

Madame Lidia Antinoro, Stazione Sperimentale per la Lotta Antimalarica, Rome, Italy, spent parts of the interval June 5 to 20 in the National Museum, examining the collections of ticks, mosquitoes, and blood-sucking flies, and in consultation with H. E. Ewing and C. T. Greene, the Bureau's specialists in these groups.

T. Bainbrigge-Fletcher, Imperial Entomologist of India, located at Pusa, India, recently donated to Mr. Busck for the collections about 600 species of Indian Microlepidoptera, all reared and authoritatively named. This gift makes a very important addition to the National collections, and will aid materially in the identification of specimens from the region about Pusa.

Richard Dow, a student at the Bussey Institution, Forest Hills, Mass., visited the taxonomic unit June 11, to examine certain sphecoid wasps of the genera Trypoxylon and Podium in the collections.

On June 20 Dr. E. A. Chapin, of the Bureau's taxonomic unit, left Washington to spend about 10 days examining the collection of beetles in the Academy of Natural Sciences, Philadelphia, Pa., at the Japanese Beetle Laboratory, Moorestown, N. J., and in the American Museum of Natural History, New York City.

Alan Nicolay, of Montclair, N. J., spent June 27 in the National Museum, examining types of beetles in the Casey Collection of Coleoptera.

Dr. W. Dwight Pierce arrived in Washington from the Philippine Islands about June 1, and is making his temporary headquarters at the National Museum. He is revising manuscripts and seeing to the identifications of various economic insects which he sent back from the Philippines, as a result of his intensive work on sugarcane insects there.

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## INSECT PEST SURVEY

J. A. Hyslop, in Charge

Dr. F. M. Wadley, of the Insect Pest Survey, was in Kansas and adjoining States for about six weeks in May and June, observing the recurrence of Brood IV of the periodical cicada. He made a considerable addition to survey records. Some environmental studies were made which are of special interest because this brood extends farther west than any other, and farther south than other 17-year broods except those which occur in the mountains.



## CEREAL AND FORAGE INSECTS

W. H. Larrimer, in Charge

M. M. Darley and Ford H. Harries, of the field laboratory at Salt Lake City, Utah, resigned from the service, effective June 16, to complete work for their doctorates at the Ohio State University.

In this division, in June, Bernard A. App was appointed Junior Entomologist, for service at Sandusky, Ohio, Loyd L. Stitt, Junior Entomologist, for service at Tempe, Ariz., Heber C. Donohoe, Field Assistant, at Bozeman, Mont., Jack Z. Horton, Field Assistant, at Wichita, Kans., R. Swain, Field Assistant, at Webster Groves, Mo., and John T. Bigham and James G. Conklin, Field Assistants, at Arlington Farm, Rosslyn, Va.

T. E. Holloway, in charge of the field laboratory at New Orleans, La., spent June 19 to June 23 in the Washington office in consultation with Bureau officials regarding the work on sugarcane insects.

George G. Ainslie and George W. Barber visited the Washington office in June, while on vacation.

John W. Scrivener has been appointed Agent, effective June 16, for duty at Arlington Farm, Rosslyn, Va.

The field laboratory recently at Richmond, Va., a branch of that at Charlottesville, Va., has been transferred to Savannah, Ga. Dr. George W. Barber will remain in charge.

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## STORED-PRODUCT INSECTS

E. A. BACK, in Charge

R. T. Cotton attended a grain fumigation in New York on June 3.

On June 5 W. D. Reed left Fresno, Calif., for Washington, where he arrived June 10. He will take charge of investigations of the tobacco beetle. On June 30 he went to Danville, Va., his new headquarters.

Perez Simmons was sent by the Fresno Rotary Club as one of its delegates to the National Convention of Rotary Clubs held in Chicago in the latter part of June. During the past year Mr. Simmons has been chairman of the program committee of the club at Fresno.

C. K. Fisher, who on July 1 will assume charge of investigations of the bean weevil, left Modesto, Calif., for Washington, on June 26.

The property at Sligo, Md., formerly leased as a laboratory of the Division of Deciduous-Fruit Insects, has been issued by this division for similar purposes for the coming year. Alterations and repairs were in progress in the latter part of June.

Clarence R. Collins, of the Kansas State Agricultural College, has been appointed temporary Field Assistant, with headquarters at Manhattan, Kans.

William G. Hamilton, a student of American University, Washington, D. C., has been appointed temporary Field Assistant, with headquarters at Sligo, Md.

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## LIBRARY

Mabel Colcord, Librarian

## NEW BOOKS

Bayliss, H. A.

. . . Parasitic Nematoda and Acanthocephala collected in 1925-1927. p. [541]-599, illus. Cambridge, University Press, 1929. (Discovery Reports, v. 1.)

Bryk, Felix.

Papilionidae II (Papilio). 59-509 p. Berlin, W. Junk, 1930. (Lepidopterorum Catalogus, Embrik Strand, pt. 37.)

Guyer, M. F.

Animal micrology . . . ed. 3, 303 p., illus. Chicago, University of Chicago Press [1930].

Imms, A. D.

A general textbook of entomology, including the anatomy, physiology, development and classification of insects. Ed. 2, rev. 703 p., illus. London, Methuen & Co., ltd., 1930.

Kramer, Ulrich.

Die Rassenzucht der schweizer Imker . . . hrsg. vom Vorstand des Vereins Deutsch-Schweizerischer Bienenfreunde. 7 Aufl. 208 p., illus. Aarau, Sauerländer & Co., 1930.

Kruckeberg, H. W.

George Christian Roeding, 1868-1928. The story of California's leading nurseryman and fruit grower. A tribute written and prepared by direction of the Roeding Memorial Committee, under authority of the California Association of Nurserymen . . . 109 p., plates, port. Los Angeles, The California Association of Nurserymen, 1930.

Lindner, Erwin.

Die Fliegen der palaearktischen Region. Lfg. 30-31. Stuttgart, E. Schweizerbart'sche Verlagsbuchhandlung (Erwin Nagele), 1928.

Schenkling, S.

Coleopterorum Catalogus, pt. 107-110. Berlin, W. Junk, 1930. Contents: Part 107. Hetschko, A. Colydiidae. 124 p. Part 108. Hetschko, A. Phalacridae, Mycetophagidae, Tretothoracidae, Jacobsoniidae, Cavicoxumidae, Gnostidae. 26 p. Part 109. Hetschko, A. Cucujiidae, Thorictidae (Suppl.), Cossyphodidae (Suppl.) 122 p. Part 110. Dalla Torre, K. W., & Vos, E. Curculionidae: Archolabinae, Attelabinae, Apcderinae. 142 p.

Shinoda, Osamu.

Contributions to the knowledge of intestinal secretion of insects. III. On the digestive enzymes of the silkworm. Journal of Biochemistry, v. 11, p. 345-367, January, 1930.

Smith, T.

The breeding of Lepidoptera. North Staffordshire Field Club. Transactions and Annual Report, v. 60, p. 96-102, 1926.

Stichel, H.

Ricidinidae I: Nemeobiinae I. 112 p. Berlin, W. Junk, 1930. (Lepidopterorum Catalogus, ed. Embrik Strand, pt. 33.)

Theobald, F. V.

The plant lice or Aphididae of Great Britain, v. 3, 364 p., illus. Ashford, Kent, Headley Brothers, 1929.

Wille, Johannes.

. . . Die Rübenblattwanze Piesma quadrata Fieb. 116 p., illus. Berlin, Julius Springer, 1929. (Monographien zum Pflanzenschutz, hrsg. von . . . H. Morstatt. No. 2.)

Oberthur, Charles.

Études de lépidoptérologie comparée. Fasc. XXII, pt. 1-2, Fasc. XXIII. Rennes, Imprimerie Oberthur, 1924-1925.

Pinto, Caesar.

Tratado de parasitologia. v. 4, pt. 1-2. 2 v., illus. Rio de Janeiro, Pimenta de Mello & C., 1930. (Bibliotheca scientifica Brasileira dirigida pelo Prof. Dr. Pontes de Miranda.) Contents: Arthropodes parasitos e transmissores de doenças.

Plavilstshikov, N. N.

. . . Die Agapantica Arten der palaearktischen Region. 40 p. Troppau, Reitter, 1930. (Bestimmungstabellen der europäischen Coleopteren, 98 Heft.)

Regan, W. S.

Results of insecticide tests for the control of codling moth and observations on codling moth activity in the Yakima Valley, Washington. Season of 1929. 16 p. Berkeley, Calif., and Yakima, Wash., California Spray-Chemical Company, 1929.



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